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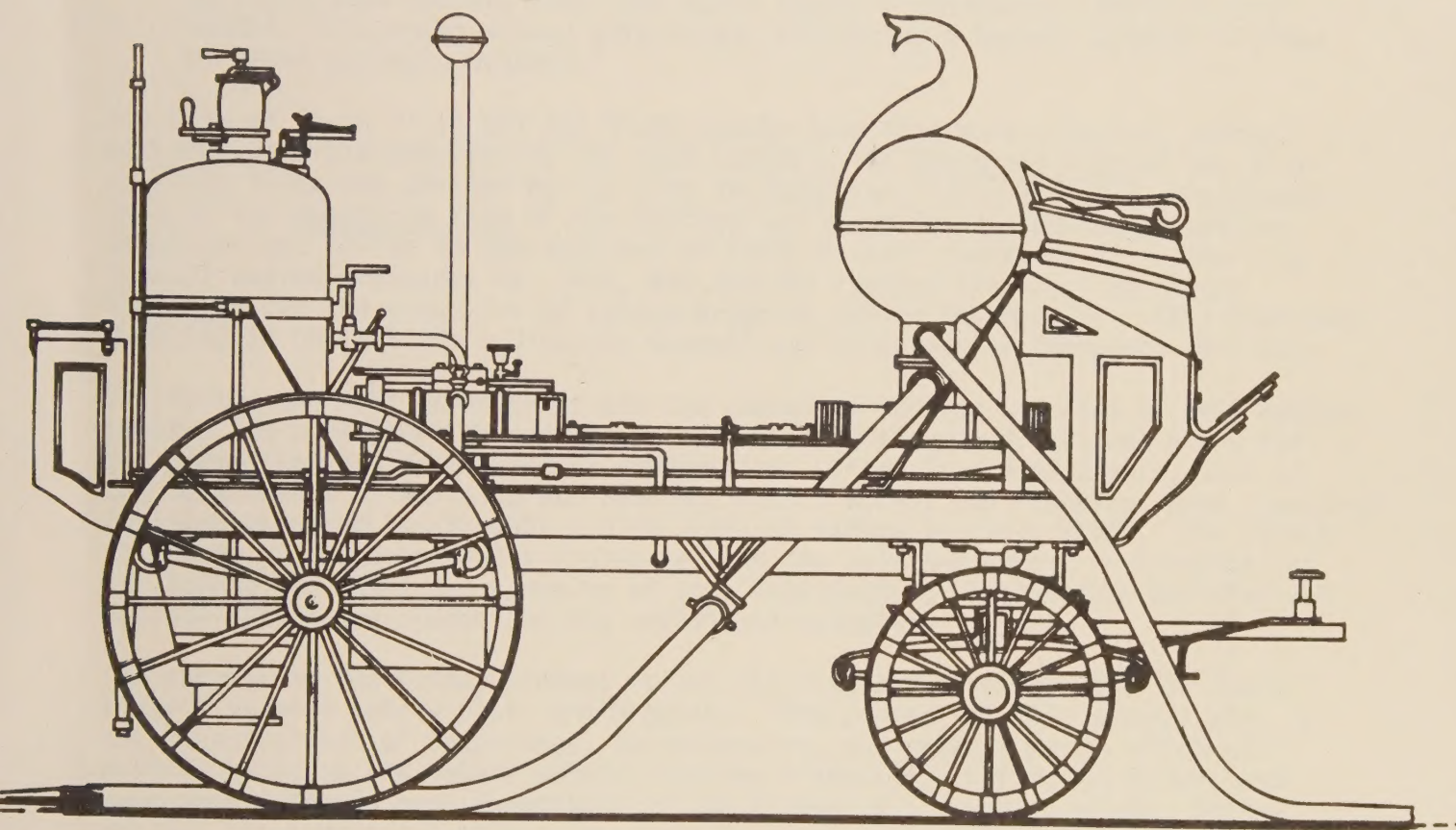
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An Element of the General Plan

City of Chula Vista, Calif.

Safety Element/General Plan
City of Chula Vista, California

Introduction

Pursuant to Chapter 1026 of the Statutes of 1971, the State Planning and Zoning Law (Government Code) now requires that each city and county shall prepare and adopt a Safety Element. The complete legislative charge is embodied in Section 65302.1, which reads:

"The general plan shall also include, in addition to the elements specified in Section 65302, a safety element for the protection of the community from fires and geologic hazards including features necessary for such protection as evacuation routes, peak load water supply requirements, minimum road widths, clearances around structures, and geologic hazard mapping in areas of known geologic hazards."

The City of Chula Vista and San Diego County have done much disaster, safety, and emergency planning during the past decade. The Emergency Plan of the City of Chula Vista was adopted by the City in September, 1973, and is a constituent part of the Emergency Plan of the Unified San Diego County Emergency Services Organization. Prior to the adoption of Chula Vista's Emergency Plan, the City Council passed Ordinance No. 1408, and thereby created the local machinery necessary for the execution of action programs during emergencies. This ordinance established Chula Vista's Disaster Council and Directory of Emergency Services.

The Police and Fire Departments are the emergency-service agencies of this municipality, and have therefore developed extensive strategy and tactical plans for the prevention and resolution of emergencies. Other line departments, such as the Departments of Building and Housing, Public Works, and Planning, have sponsored legislation which has brought a high level of safety to Chula Vista. The street standards of the Subdivision Ordinance, and the bulk and height requirements of the Zoning Ordinance are examples of this legislation. The Uniform Building and National Electrical Codes provide additional examples.

The purpose of the Safety Element is not the restatement of the City of Chula Vista's several safety plans and programs. The purpose of this general plan is the establishment of long-range, comprehensive, and general policy which will provide existing and future safety programs direction, continuity, order, and substance. The de novo components of the Element will consist of the Introduction, Statements of Policy, the Plan Diagram, and the Fire Safety Plan. The implementation Program will consist of Chula Vista's existing city-planning, safety, emergency, disaster plans and ordinances. As the need arises, the Implementation Program can be augmented by the City Council's adoption of effective, de novo subprograms.

Although the instant element includes basic seismic-safety policy, and the element's plan diagram indicates the principal seismic faults which traverse

the Chula Vista Planning Area, the matter of geologic hazards will be definitively covered in the nascent Seismic Safety Element. The Safety Element and the Seismic Safety Element should be considered as complementary, companion plans.

Goal, General Objectives, and Statements of Policy

Goal

The primary goal of the Safety Element is the protection of the City of Chula Vista, the Chula Vista Planning Area, and their constituent communities from fires and geologic hazards.

General Objectives

The preservation of life, health, and property; the continuity of government and order; the maintenance of municipal services; the rapid resolution of emergencies; and the rapid return of community normalcy and public tranquility are the general objectives of the Safety Element.

Statements of Policy

1. The City of Chula Vista shall promote the establishment and maintenance of safe and effective evacuation routes; an ample peak-load water supply; adequate road widths; and safe clearances around buildings, in accordance with the legislative change embodied in Section 65302.1 of the Government Code.
2. The streets and rights-of-way of the City of Chula Vista shall be of adequate width and construction to facilitate the movement of emergency vehicles during fires and emergencies resulting from geologic hazards. Said streets and rights-of-way shall also be adequately designed to facilitate the evacuation of people during fires and the said emergencies, if and when the authorities determine that evacuation is the best course of action.
3. The open space surrounding structures shall be sufficient to promote fire safety.
4. The space separating buildings shall be consistent with the tenets and precepts of fire-safety and seismic-safety practices.
5. The peak load water supply shall adequately meet the needs of the Chula Vista Planning Area during periods of flood, fire, and natural disaster.
6. All major geologic faults and areas susceptible to geologic hazards, such as ground movement, land slides, liquefaction, ground failure, seiches, or tsunamis, shall be identified on the Plan Diagram of the Seismic Safety Element of the General Plan. The Safety Element's Plan Diagram shall also identify the five major seismic faults in the Chula Vista Planning Area.
7. No land use shall be established; no structure shall be constructed; and no land shall be subdivided unless the proposed establishment, construction, or land subdivision is consistent with the principles of seismic safety. This policy shall cover, but not be limited to grading, and "cuts and fills."
8. During periods of major emergency, the Emergency Plan of the City of Chula Vista shall become operative. The Disaster Council and Director of Emergency Services shall execute the plan.

9. The Zoning and Subdivision Ordinances shall be amended, as required, to implement the policies of the Safety and Seismic Safety Elements.
10. While the Seismic Safety Element shall be the controlling plan with respect to geologic hazards, the Safety Element shall be paramount with respect to emergencies involving fire.
11. The Fire Code shall be consistent with the policies embodied herein, and in the Seismic Safety Element.

Standards and Design Proposals

Fire Stations

1. As a general rule, fire stations shall be distributed so as to provide an average engine response time of four minutes, after receipt of alarm, to all urbanized parts of the municipality.
2. The precise location of fire stations shall be determined by the following factors:
 - a. Land Use Pattern, residential density, and building intensity.
 - b. Street patterns and traffic volume.
3. Fire stations should be sited on arterial streets or collectors. If circumstances require the location of a fire station on a minor street, the said minor street should lead directly to an arterial street or collector.
4. Fire stations, where practicable, should be located on corner lots, or lots with primary and secondary (alley) accesses. Stations should be situated a minimum of three hundred feet (300') from signalized intersections.
5. Fire station sites must be large enough to accommodate a station office, living quarters for the on-duty personnel, areas for apparatus storage and maintenance, off-street parking, and environmental amenities, such as landscaping and walks. Where stations are located in areas of anticipated growth, the fire station site should be of adequate size to accommodate planned expansion. New fire stations should be built to house no less than two apparatus.
6. The design of fire stations should be environmentally and aesthetically compatible with adjacent land uses.
7. Where practicable, fire station houses should be one story in height.
8. The siting of fire stations within the City of Chula Vista shall be consonant with the standards of professional fire-fighting practice. The standards of the Insurance Service Office (ISO) shall, where practicable, and responsive to local circumstances, be employed as preliminary guidelines.

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Fire Flow

1. Where street patterns permit the installation of gridiron systems of water distribution, the following fire flows should be available during periods of peak, domestic water demand.

Fire Flow Standards: Gridiron Systems

<u>Land Use Classification</u>	<u>Gallons/Minute (gpm)</u>
A. Low and medium density residential	2,000 gpm from 3 adjacent hydrants flowing simultaneously
B. High density residential and commercial	4,000 gpm from 4 adjacent hydrants flowing simultaneously
C. Industrial	6,000-9,000 gpm from 6 adjacent hydrants flowing simultaneously
D. Major commercial	12,000 gpm to any given block.

2. Where street patterns necessitate the development of water distribution systems on dead-end mains, the following fire flows should be provided.

Fire Flow Standards: Dead-End Mains

<u>Land Use Classification</u>	<u>Gallons/Minute (gpm)</u>
A. Low and medium density	1,500 gpm*
B. High density residential	2,000 gpm*
C. Industrial	3,000 gpm*

*Last 2 fire hydrants flowing simultaneously

Minimum Road Widths and Clearances Around Structures

1. The road width standards for fire protection and evacuation routes are generally identical to the street width standards embodied in Section 28.903 B. of the Subdivision Ordinance of the City of Chula Vista, to-wit:

<u>Classification</u>	<u>Min. R/W Width</u>	<u>Min. T/W Width</u>
Prime Arterial (6) Lane	126'	106' (18' Median)
Major Road (4) Lane	100'	82' (18' Median)
Collector Road (4) Lane	80'	64'
Residential Collector Street	55'	40'
Residential Street	51'	36'
Commercial-Industrial Road	72'	52'
Frontage Road	46'	30'
Two-Way Hillside Local Street	44'	32'
One-Way Hillside Local Street	36'	24'
Local Street (No Parking)	34'	24' (P.U.D. only)

R/W = right-of-way; T/W = travelway

2. Notwithstanding the above statement, the diameter of the travelway of the terminus of a cul-de-sac street should not be less than 80 feet.
3. Fire engines, as a general rule require a 26'-wide path around structures for proper maneuvering. The provision of this clearance around structures is impracticable in most residential and commercial developments. With respect to high-density residential and commercial structures the Fire Chief may accept on-site fire-protection facilities in lieu of compliance with the subject "clearance-around-structures" standard.

Evacuation Routes

While the prevailing view of disaster and emergency planners is that the evacuation of neighborhoods and subneighborhoods during periods of emergency tends to complicate the solution of the involved problems, and actually precludes the effective movement of emergency vehicles and personnel, there may be times when evacuation on a limited scale is the only solution. Under these circumstances, the people should be evacuated to neighborhood and community schools, hospitals, and public facilities, where they could receive adequate care and treatment.

In the event of a major disaster the Disaster Council might feel that a large part of Chula Vista should be evacuated. This evacuation could best be conducted over the following arteries:

- A. I-5, I-805, I-54 (proposed) and the San Miguel Freeway (proposed).
- B. E, Bonita Road, H, J, L Streets and Telegraph Canyon Road.
- C. Naples, Palomar and Main Streets; Orange Avenue.
- D. Broadway, Fourth Avenue, Hilltop Drive, Oleander Avenue, Otay Lakes Road, Third Avenue and Melrose Avenue.

Fire Safety in 1990 - The Fire Safety Plan

According to the General Plan of the City of Chula Vista, the population of the Planning Area of this municipality will exceed 130,000 by 1990. Most of this population will be within the corporate limits of Chula Vista. While the City's present population of about 75,000 is primarily housed in the Central Chula Vista and Castle Park communities, the future growth will substantially occur to the east, in the Telegraph Canyon, Bonita and Lakes communities. This population growth and land use expansion will require the expansion and redeployment of fire protection facilities. The precise size and location of fire facilities in 1990 will be governed by the precise patterns of population and land use by this target year.

If the population projections of the Planning Department are supported by time and events, the number of fire stations within Chula Vista will increase from four to eight, and the number of fire department personnel will increase from 70 to about 150. The new stations, which will be located in accordance with standards predicated upon response time, will be sited in the Telegraph Canyon, Tidelands, and Bonita Communities.

The Fire Department's long-range program is not solely governed by population increases and land-use expansions. Chula Vista, like other viable cities, manifests a propensity to grow vertically. High-rise and medium-rise structures present enormous fire protection problems. These problems will require the Fire and Building Codes to include the following safety features:

1. Safe access by fire fighters to all parts of high-rise and medium-rise buildings.
2. The installation of primary and secondary water and power systems in major buildings, including high-rise and medium-rise structures.
3. The installation of adequate fire-alarm systems and automatic fire-detection and extinguishing systems in all major buildings and complexes.

The provision of effective fire protection is dependent on the extancy of adequate water, adequate water lines, and adequate water pressure. Chula Vista's growth, therefore, should be gauged by its sources of domestic water, and its capacity to provide domestic water during periods of peak demand and emergencies.

The Fire Department and other municipal line agencies concerned with public safety propose to effectuate the Element through the employment of concerted action, research, and public and staff educational programs.

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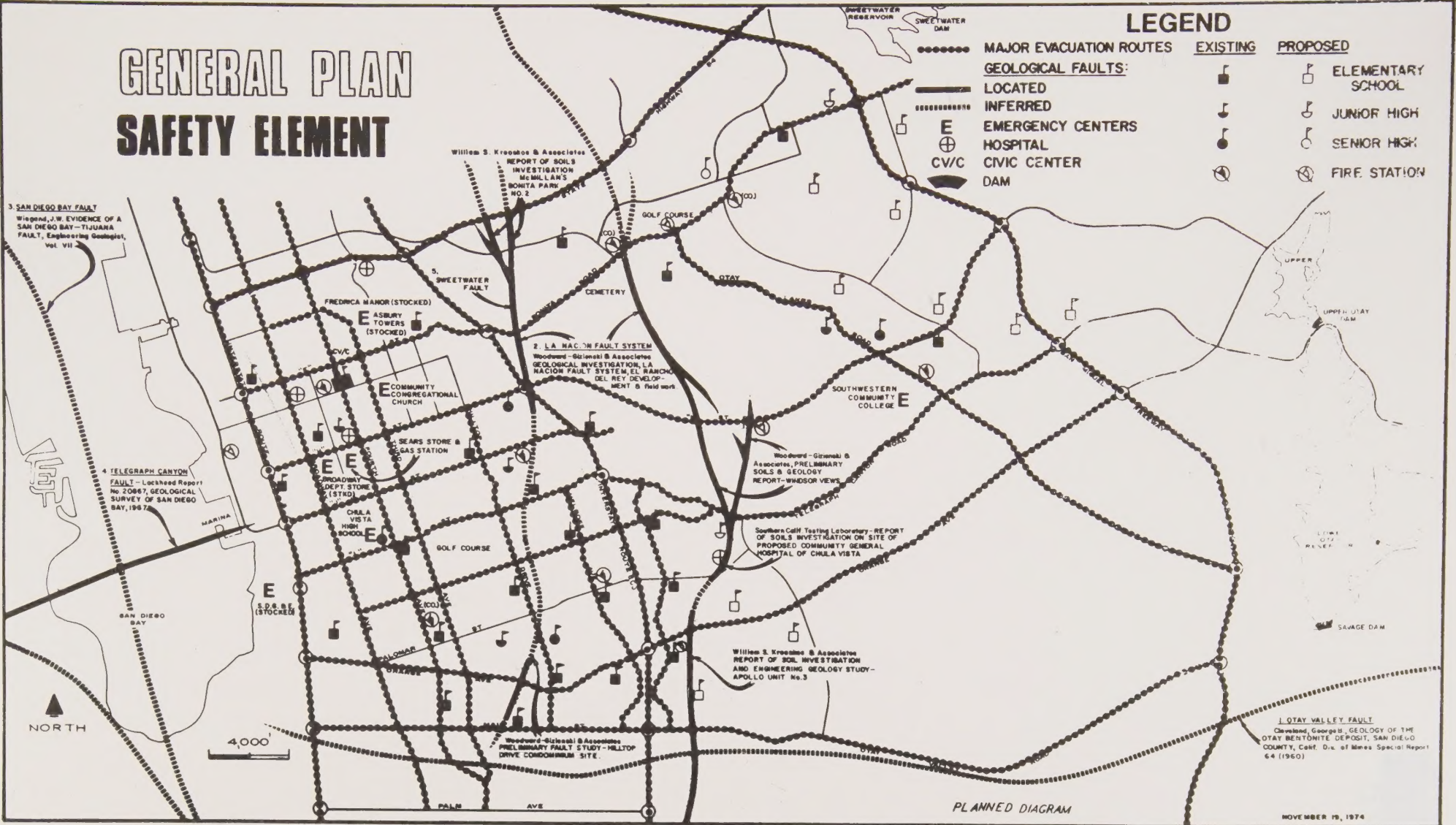
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"Safety Element"

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